## to the first that the team appears in the N T the team are the pass that the team

## ABSTRACT

A redundant changeover apparatus causing no frame synchronization loss even upon occurrence of changeover between working system and protection system. In case of an in-apparatus synchronization system, when two input signals which are mutually asynchronous in phase are changed over by a changeover switch, a changeover switch, a clock extractor, a PLL circuit, and a clock changing portion transmit signals with clocks before the changeover being gradually changed to clocks after the changeover. Alternatively, in case of an in-apparatus synchronize system, data are separated from clocks so that the data are once changed to data with reference clocks, and then for the data, clocks before the changeover are gradually changed to clocks after the changeover.